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IN THE CLAIMS:

1. (currently amended) An apparatus for detecting currents in a three-phase power transmission system, said apparatus comprising:

a first detection circuit electrically coupled to a first phase of said three-phase transmission system;

a second detection circuit electrically coupled to a second phase of said three-phase transmission system different than said first phase; and

an event output switch electrically coupled to said first detection circuit and said second detection circuit, said event output switch configured to actuate when a subsynchronous current on at least one of said first phase and said second phase exceeds a pre-selected subsynchronous current setpoint;

wherein said first detection circuit comprises an alternating current analog output and a direct current analog output and said second detection circuit comprises an alternating current analog output and a direct current analog output.

2. (currently amended) An apparatus in accordance with Claim 1 wherein at least one of the first detection circuit and the second detection circuit is electrically coupled to a series capacitor bank.

3. (original) An apparatus in accordance with Claim 1 wherein said event output switch is configured to actuate in less than approximately one second when a subsynchronous current is detected.

4. (original) An apparatus in accordance with Claim 1 wherein said pre-selected subsynchronous current setpoint is between approximately 17% and approximately 67% of a nominal line frequency.

5. (cancelled)

6. (original) An apparatus in accordance with Claim 1 wherein said first detection circuit and said second detection circuit are operable using at least one of a current input and a voltage input.

7. (original) An apparatus in accordance with Claim 6 wherein said first detection circuit and said second detection circuit comprise a jumper switch configured to select at least one of said current input and said voltage input.

8. (original) An apparatus in accordance with Claim 1 wherein said apparatus is operable using at least one of a plurality of line frequencies, a subsynchronous passband, a passband gain, and a variable current range.

9. (currently amended) A series capacitor bank for a three-phase power transmission system, said capacitor bank comprising:

a first detection circuit electrically coupled to a first phase of said three-phase transmission system;

a second detection circuit electrically coupled to second phase of said three-phase transmission system different than said first phase; and

an event output switch electrically coupled to said first detection circuit and said second detection circuit, said event output switch configured to actuate when a subsynchronous current on at least one of said first phase and said second phase exceeds a pre-selected subsynchronous current setpoint;

wherein said first detection circuit and said second detection circuit are operable using at least one of a current input and a voltage input, said first detection circuit and said second detection circuit comprise a jumper switch configured to select at least one of said current input and said voltage input.

10. (original) A series capacitor bank in accordance with Claim 9 wherein said event output switch is configured to actuate in less than approximately one second when a subsynchronous current is detected.

11. (original) A series capacitor bank in accordance with Claim 9 wherein said pre-selected subsynchronous current setpoint is between approximately 15% and approximately 65% of a nominal line frequency.

12. (original) A series capacitor bank in accordance with Claim 9 wherein said first detection circuit comprises an alternating current analog output and a direct current analog output and said second detection circuit comprises an alternating current analog output and a direct current analog output.

13. (cancelled)

14. (cancelled)

15. (currently amended) A three-phase power transmission system, said transmission system comprising:

a series capacitor bank;

a first detection circuit electrically coupled to a first phase of said three-phase transmission system;

a second detection circuit electrically coupled to second phase of said three-phase transmission system different than said first phase; and

an event output switch electrically coupled to said first detection circuit and said second detection circuit, said event output switch configured to actuate when a subsynchronous current on at least one of said first phase and said second phase exceeds a pre-selected subsynchronous current setpoint at said series capacitor bank;

wherein said first detection circuit comprises an alternating current analog output and a direct current analog output and said second detection circuit comprises an alternating current analog output and a direct current analog output.

16. (original) A power transmission system in accordance with Claim 15 wherein said event output switch is configured to actuate in less than approximately one second when a subsynchronous current is detected.

17. (original) A power transmission system in accordance with Claim 15 wherein said pre-selected subsynchronous current setpoint is between approximately 17% and approximately 67% of a nominal line frequency.

18. (cancelled)

19. (original) A power transmission system in accordance with Claim 15 wherein said first detection circuit and said second detection circuit are operable using at least one of a current input and a voltage input.

20. (original) A power transmission system in accordance with Claim 19 wherein said first detection circuit and said second detection circuit comprise a jumper switch configured to select at least one of said current input and said voltage input.

21. (cancelled)

22. (cancelled)

23. (cancelled)

**Remarks**

The Office Action mailed June 24, 2003, has been carefully reviewed and the foregoing response has been made in consequence thereof. Claims 1-4,6-12,15-17, 19, and 20 are now pending in this application. Claims 5, 13, 14, 18 and 21-23 have been cancelled.